

Case study

Huafeng Group of Meteorological Audio & Video Information

» Huafeng Group of Meteorological Audio & Video Information adopted Fujitsu's Scalable File Server Solution (SFSS). That Network Attached Storage (NAS) solution made easy work of their file storage and content retrieval «



The customer

Country: China

Industry: Broadcast & TV

Founded: 1980

Website: <http://www.tvhf.com>

Scale: Through TV, radio, mobile phone, IPTV, outdoor media, mobile media, networks, etc., Huafeng Group has established a meteorological service structure that features simultaneous multimedia broadcasting and 3D coverage. The group now boasts 40 million household users in 217 prefectural level and large cities across 30 provinces of China.



The challenge

With its programs diversifying and enjoying a rising coverage and usage rate, Huafeng Group needed more agile program management and access infrastructure to better support its broadcasting business. This included support for distribution and broadcasting of large video files and management of increasing numbers of source programs and reference material.

The solution

To meet this challenge, Fujitsu provided its Scalable File Server Solution (SFSS). This has excellent cost performance and handles unstructured data with the high scalability for continuous growth. Based on PRIMERGY RX300, ETERNUS DX440 and Symantec FileStore this dynamic NAS solution would enable Huafeng Group to store high capacity program resources, directly retrieve program files and deliver a flexible, scalable and responsive configuration.

The customer

Beijing's Huafeng Group of Meteorological Audio & Video Information (Huafeng Group) is a direct subsidiary enterprise of the China Meteorological Administration (CMA). It is responsible for issuing weather information at a state level as well as early warnings and forecasts of meteorological events and disasters via the region's various media outlets. It also offers meteorological services to the public and 3rd party media companies and provides popular education on meteorological topics through the production of audio-visual programming. The group's overall business in fact covers a broad range of services in addition to the production of weather forecasts and feature programs. This includes the professional operation of on-demand digital distribution channels, meteorological audio & video information technology services, new media business, and advertising management.

Huafeng Group's weather forecasts, early warning and infotainment programs are broadcast through 22 different channels, including CCTV (10 channels), Xinhua News Agency, Travel Channel, CEC, Phoenix TV, SUNTV, China Satellite TV, and CNR. In addition it produces over 130 first-run programs which are used on the Huafeng Group's China Weather TV, a professional 24 hour weather TV channel that is also sponsored by China's meteorological administration and the meteorological divisions of the different provinces. This has so far extended its presence into 217 prefectural level and larger cities across 30 provinces including autonomous regions and municipalities directly under central government control. As this covers over 40 million households it plays an important role in the distribution of public meteorological services for the China Meteorological Administration.

The challenge

Expand Storage Capacity Required for Comprehensive Broadcast Program Sources and Reserves

Huafeng Group shoulders the mission of weather forecasting to major centers nationwide. To ensure timely distribution and provision of its superior and diversified programming it needed to upgrade the broadcast infrastructure and extend its stored program reserves from the existing 48 hours to a full week of broadcasting. This included extending the tier one storage on the broadcasting server (used for program distribution) to include tier two program archive storage. These would work together to provide all-round support for the various program sources of the broadcasting system.

Large Video File Broadcasting Support

As video program files can be extremely large, Huafeng Group also

The benefits

- The advanced cluster architecture of Fujitsu's SFSS solution enables an Active-Active, highly-reliable, storage architecture that ensures the security of the broadcasting system files
- The NAS storage solution supports rapid scheduled transmissions and helps relieve the burden of large video files
- The scalability enables large storage capacity for the various program sources
- Integrated and convenient operation simplifies the management and use of broadcasting system applications
- Flexible configuration, outstanding scalability and the excellent performance/cost ratio protects the user's investment

needed a much more direct and simple management system and an operational system for content retrieval. This would ensure convenient and easier operation and provide the ability to broadcast program sources smoothly and at lower cost - even if the video broadcast files were large in size.

High Demand for a Flexible and Scalable Configuration

Additionally, with more and more diversified program systems and richer broadcast content, program sources were expanding very quickly. This required a program storage system that was both highly flexible and very scalable.

The solution

To expand the tier-two storage, provide easier and more flexible file retrieval, as well as system flexibility, security and scalability, Fujitsu offered its Scalable File Server Solution (SFSS). This is a NAS scale-out solution based on a combination of PRIMERGY RX300 servers, ETERNUS DX440 disk storage and Symantec FileStore software. It creates a high performance file server environment and delivers integrated management efficiency at lower cost, compared to using systems based on traditional file servers. It also provides enterprise-class clustered file services on enterprise-class storage hardware which met the other requirements for better management and file security.

The benefits

Highly efficient file storage system provides perfect support for broadcasting system expansion

The high data availability, outstanding scalability and multi-level data processing capability of the Fujitsu SFSS NAS network storage solution have fully met Huafeng Group's needs for data security and file retrieval. It also met the storage upgrade and expansion requirements.

Improved management and application efficiency

Huafeng Group's massive program sources need to be available and easily retrievable at any time. Now it can provide up to 48 hours of broadcasting sources on the broadcast server and a further weeks' worth of content on the expanded tier-two storage provided by the SFSS NAS solution.

Products and services

A Scalable File Server Solution based on :

- Fujitsu PRIMERGY RX300 Servers
- Fujitsu ETERNUS DX440 Storage Systems capable of max 960 HDD.
- Symantec FileStore

These measures deliver secured storage of all files together with management and quick access for effective utilization of all available data and information. This has improved the application efficiency of the whole broadcasting system.

Simple retrieval of large video files

The file-based storage system is very easy to use. It allows fast access to data in the system with the same ease as retrieving local files. Very suitable for the application environments at TV stations it makes a successful example of the easy retrieval of video files. The SFSS NAS storage architecture also facilitates centralized data management and retrieval, lowering the migration workloads between the core on-line facilities and the tier two-storage. Based on enterprise class hardware technology it also improves the system security and removes the need for complex maintenance and management in the technical department.

Conclusion

Different from structured enterprise data management, with its well defined high security techniques and data environments, the management of file-based, or "unstructured" content has become one of the most pressing and persistent challenges facing today's IT environments. The SFSS NAS network storage system deployed by Fujitsu uses the comprehensive technology of enterprise storage to deliver highly scalable and secure NAS storage. This met Huafeng Group's expectations for the upgrade of its tier two broadcast storage. Not only did it ensure that further increases in storage for expanding program resources and reserve program content will be met, it also demonstrated clear advantages in large video file retrieval, and access management. This provided a demonstrable difference and significance, as it helped achieve a high quality program broadcasting system for multi-point delivery, as required in a large TV and multi-media environment such as China.

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